# California Conference of Directors of Environmental Health Baseline Draft (v.12.02.05)

#### TEXT OF PROPOSED REGULATIONS

(Add to California Code of Regulations, Title 27, Division 2, Subdivision 1, Chapter 7)

## CHAPTER 7. ONSITE WASTEWATER TREATMENT SYSTEMS ARTICLE 1. DEFINITIONS

#### §22900. SWRCB – General Definitions.

Except as otherwise indicated in this Article, definitions of terms used in the SWRCB-promulgated portions of this Subdivision shall be those set forth in Division 7 (commencing with Section 13000) of the Water Code and Chapter 6.5 of Division 20 of the Health and Safety Code (commencing with Section 25100).

"Authorized local agency (ALA)" means a city or county government body or a responsible management agency that has formal, written authorization from a RWQCB to administer this Chapter, or any portion thereof.

"At-grade system" is an OWTS dispersal system that has specific design parameters located at or close to the original grade. The discharge from an at-grade system is always subsurface.

"Basin plan" is the same as "water quality control plan" as defined in Division 7 (commencing with Section 13000) of the Water Code. The listed beneficial uses of the State's surface water and groundwater are designated by each RWQCB in basin plans.

"Bedrock" is the rock, usually solid, that underlies soil or other unconsolidated surficial material.

"Certification" is an expression of professional opinion through certificate, stamp, or signature that an OWTS, or its components, meets industry standards that are the subject of the certification. Certification does not constitute a warranty or guarantee, either expressed or implied. For proprietary supplemental treatment systems, certification is a statement that indicates the subject system has demonstrated performance through an independent, third-party evaluation of performance data, but still does not constitute a warranty or guarantee, either expressed or implied.

"Conventional system" is an OWTS consisting of a septic tank and typically a gravity subsurface dispersal system. A conventional system may include septic tank effluent pumping where the dispersal area is located at a higher elevation than the associated septic tank.

"Dispersal system" is a leachfield, seepage pit, mound, at-grade, subsurface drip system, or other type of system approved by the PA for final wastewater treatment and subsurface discharge.

**"Domestic wastewater"** means the type of wastewater normally discharged from or similar to that discharged from plumbing fixtures, appliances and devices including, but not limited to toilets, bathtubs, showers, laundry facilities, dishwashing facilities, and garbage disposals. Domestic wastewater does not include industrial-process wastewater or high strength waste.

**"Effluent"** is the wastewater discharged from an OWTS treatment component or any portion thereof.

**"Exemption"** is an exception to these regulations, or a portion thereof, by the RWQCB in accordance with Article 6 of this Chapter.

**"Existing OWTS"** is an OWTS that was permitted or otherwise accepted for continued use by the applicable local authority before codification of this Chapter.

**"Failure"** is a condition of an OWTS that causes or threatens to cause impairment of beneficial uses of surface water or groundwater or threatens public health by creating a potential for direct or indirect contact between domestic wastewater or partially-treated domestic wastewater and the public. Examples of failure include:

- 1. Domestic wastewater backing up into a structure.
- 2. Domestic wastewater leaking from an OWTS to ground surface or groundwater and causing contamination, pollution or nuisance as defined in Section 5410 of the Health and Safety Code.

"Groundwater" is any subsurface body of water, including perched water.

**"Leachfield"** means any one of various dispersal systems designed to provide subsurface treatment and disposal of effluent from a septic tank or supplemental treatment system. Leach fields can consist of trenches or beds of various configurations, or gravel-less chamber systems.

"Local agency" means any agency having authority as provided by a county or city ordinance to regulate OWTS. This may include, but is not limited to, county/city health departments, building departments, or departments of public works.

"Major repair" is defined as OWTS improvements or corrective work wherein the OWTS treatment method and/or dispersal system type is changed from the pre-existing condition, regardless of whether or not a failure condition has occurred.

"Memorandum of Understanding" (MOU) is a formal agreement between the RWQCB and a local agency authorizing the local agency to administer this Chapter, or a portion thereof.

**"Mound system"** is an aboveground soil treatment, dispersal, and absorption system following an OWTS treatment unit. Mound systems have a subsurface discharge and specific design parameters.

"New OWTS" is a proposed or constructed OWTS permitted after the effective date of this Chapter.

"Onsite wastewater treatment system(s)" (OWTS) has the same meaning as found in §13290 of the California Water Code. The short form of the term is singular or plural, as appropriate.

"Operation permit" means a written document issued by the PA authorizing the permittee to operate and/or monitor an OWTS with supplemental treatment component. In local jurisdictions where the RWQCB is the PA, an operation permit shall be waste discharge requirements issued by the RWQCB. A construction permit for the OWTS may also be required by the local agency.

"Permit" is the written document issued by the permitting authority authorizing the permittee to install and/or operate an OWTS. "Permit" means any one of the following:

- 1. A waste discharge requirement (WDR) or conditional waiver issued by the RWQCB; or
- 2. An operation permit issued by the ALA; or
- 3. A permit to construct issued by the ALA.

"Permitting authority" (PA) is a RWQCB unless a local agency has been authorized as an ALA by a RWQCB to administer this Chapter, in which case the ALA becomes the PA.

"Person" is any individual, firm, association, organization, partnership, business trust, corporation, company, or unit of local government.

"Pretreatment" is preliminary wastewater treatment occurring prior to discharge into a septic tank or supplemental treatment unit. Pretreatment is part of the OWTS and may include, but is not limited to, oil and grease removal, BOD and TSS reduction, screening, and/or detoxification.

"Qualified professional" is an individual who, by virtue of education, training, and experience, is qualified to perform soil and/or site evaluations and the design of OWTS.

"Qualified service provider" is a qualified professional or an individual with knowledge and competency in OWTS operation, maintenance, and monitoring through experience and/or education.

"Record Plan" is the document submitted to the permitting authority providing "asbuilt" construction details of the OWTS, including but not limited to final placement of system components, sizes and specification of components.

"Seepage pit" is typically a drilled or dug hole, 3 to 6 feet in diameter and 10 to 100 feet deep, constructed to allow disposal of effluent from a septic tank or other OWTS treatment unit.

"Septic tank" is a watertight, covered receptacle designed for primary treatment of sewage and constructed to:

- 1. Receive wastewater discharged from a building;
- 2. Separate settleable and floating solids from the liquid;
- 3. Digest organic matter by anaerobic bacterial action;
- 4. Store digested solids; and
- 5. Clarify wastewater for further treatment with final subsurface discharge.

- "Septic tank effluent" is partially treated wastewater discharged from a septic tank.
- "Site" is the location of the OWTS and the proposed 100% expansion area.
- **"Slope"** is the rate of fall or drop measured as percent of grade.
- "Soil" is the naturally occurring body of porous mineral and organic materials on the land surface, and is composed of unconsolidated materials above bedrock. Soil is composed of sand-sized, silt-sized, and clay-sized particles mixed with varying amounts of larger fragments and organic material. The various combinations of particles differentiate specific soil textures identified in the USDA Soil Classification Chart. For the purposes of this Chapter, soil shall contain earthen material having more than 50 % of its volume composed of particles smaller than 0.08 inches (2 mm) in size.
  - "Soil permeability" is the capacity of the soil to transmit liquids.
- "Subsurface drip dispersal system" is a form of subsurface effluent dispersal using shallow distribution in combination with low-pressure drip emitters.
- "Supplemental treatment" is any OWTS or component of an OWTS, except a septic tank, effluent pump station, or dosing tank that performs additional wastewater treatment prior to discharge of effluent into the dispersal field.
- **"Variance"** is a mitigated allowance by the PA for a site-specific exclusion from a requirement contained in this Chapter.

Authority Cited: CA Water Code § 13291. Reference: CA Water Code § 13291(b).

"Weathered bedrock" is rock that has been exposed to the atmosphere at or near the earth's surface and changed in color, texture, composition, firmness, and/or form as a result of the exposure with little or no transport of loosened or altered material. For purposes of this Chapter, weathered bedrock is not soil.

#### **ARTICLE 2. GENERAL PROVISIONS**

#### §22901. SWRCB -- Applicability and General Requirements.

- (a) This Chapter applies to all new and existing OWTS.
- (b) No person shall construct, relocate, expand, repair or replace, any OWTS or increase the pollutant concentration or quantity of the waste stream (beyond design parameters) entering an OWTS without first filing an application for and obtaining a permit from the PA, unless said permits are not required by the PA.
  - (c) All OWTS shall comply with permit requirements issued by the PA
- (d) Property owners subject to \$22901(b) or the owner's authorized representative shall file an application (signed by the property owner) for a permit. When required by the PA, applications shall include a site evaluation report prepared by a qualified professional in compliance with \$22955 contained in this Chapter.
- (e) The PA shall not issue a permit for a new OWTS or OWTS expansion that is not in compliance with the requirements of this Chapter.

- (f) OWTS with supplemental treatment units installed after the effective date of this Chapter shall be issued operation permits if required by the PA
- (g) No portion or component of a new OWTS or OWTS subject to major repair shall be covered or buried without inspection or authorization by the PA.
- (h) RWQCBs and the local agency can establish policies and regulations that are more protective of water quality than the requirements contained in this Chapter.
- (i) All OWTS shall be operated and maintained at all times in a manner that is protective of water quality and public health.
- (j) All OWTS shall be so designed so that an expansion area equivalent to at least 100% of the required original system design may be installed if the original system cannot absorb all the sewage. No division of the lot or erection of structures on the lot shall be made if such division or structure impairs the usefulness of the 100% expansion area.

Authority Cited: CA Water Code § 13260, 13264, 13267, 13291. Reference: CA Water Code § 13260(c), 13264(a)(2), 13267(a), 13267(b)(1), 13267(c), §13291(a), 13291(b)(1)

#### §22902. SWRCB – OWTS Enforcement.

- (a) All new OWTS and OWTS subject to major repair shall be operated and maintained in compliance with all permit requirements, if any, as issued by the PA.
- (b) The PA may take enforcement action against an OWTS owner or operator for failure to comply with applicable monitoring or O&M requirements.
- (c) The permit holder shall comply with all enforcement actions within the timeframe established by the PA.
- (d) Upon revocation of a permit or enforcement action to cease discharge, the discharge from the source shall cease until the PA issues written authorization to resume the discharge.
- (e) When a person violates the provisions in this Chapter, the PA shall take appropriate enforcement action as authorized by law.

Authority Cited: CA Water Code § 13260, 13264, 13267, 13291. Reference: CA Water Code § 13260(c), 13264(a)(2), 13267(a), 13267(b)(1), 13267(c), §13291(a), 13291(b)(1), CA Health and Safety Code §5411

#### §22903. SWRCB -- Enforcement.

(a) When an existing OWTS is in failure (as that term is defined in §22900), the PA shall take timely action to inform property owners of any non-compliance and shall direct corrective action to be accomplished within a specified time. If, after consultation with the PA (if not the RWQCB), a RWQCB determines that the corrective action required by the PA is inadequate, the RWQCB shall take additional and necessary corrective action to bring the OWTS into compliance.

(b) In the course of a major repair, the PA may evaluate the entire OWTS. The PA may accept information about the performance and functioning of the OWTS from a qualified professional or qualified service provider as all or part of its evaluation.

#### ARTICLE 3. OWTS REGULATORY OVERSIGHT

#### §22905. SWRCB -- Responsible Agencies.

The SWRCB and RWQCBs are the governmental bodies responsible for administering this Chapter. An ALA may also administer this Chapter pursuant to formal authorization from a RWQCB.

Authority Cited: CA Water Code §13291(e), §13240, §13225. Reference: CA Water Code §13291(e), §13240, §13225.

#### §22906. SWRCB -- SWRCB Functions and Duties.

- (a) The SWRCB shall update the regulations and oversee statewide implementation of this Chapter.
- (b) In the event that an ALA and a RWQCB cannot agree upon the interpretation of any provision of this chapter, the SWRCB shall determine the appropriate interpretation. Authority Cited: CA Water Code §13291. Reference: CA Water Code §13291.

#### §22907. SWRCB -- RWQCB Functions and Duties.

The RWQCBs shall administer this Chapter through waste discharge requirements (WDRs) or conditional waivers of WDRs unless a local agency is authorized by a RWQCB to administer this Chapter, or any portion thereof. Prior to authorization for local agency implementation, a RWQCB shall review the local agency application for authorization to implement this Chapter and, if satisfactory, shall make a finding that the local agency is capable of implementing the requirements of this Chapter. A RWQCB shall authorize an ALA through an adopted resolution or an MOU.

- (a) Each RWQCB shall incorporate the requirements of this Chapter by reference into the appropriate basin plan. A RWQCB may impose more protective requirements, as needed to protect water quality or human health.
- (b) The RWQCB shall authorize a local agency to administer this Chapter or a portion thereof within 120 days after the application filing date unless the RWQCB makes at least one of the following determinations in writing to the ALA within 60 days of receipt of application:
  - (1) the RWQCB elects to retain administration of this Chapter; or
  - (2) the RWQCB finds that the local agency's application is incomplete; in which case the local agency must resubmit the application before the RWQCB may approve it. In such cases, the 60 days specified in  $\P(b)$  and the 120 day period for Board consideration begins anew after receipt of the corrected application; or

- (3) the RWQCB finds that the local agency does not meet the qualification requirements listed in §22908 to administer this Chapter, or any portion thereof;
- (c) the RWQCB shall review ALA implementation of this Chapter at least every five years.
- (d) the RWQCB shall provide a minimum of 90 calendar days written notice to the ALA in cases when the RWQCB proposes termination of ALA authorization to administer this Chapter.

Authority Cited: CA Water Code §13269, 13291

#### §22908. SWRCB -- Authorized Local Agency Functions and Duties.

- (a) An ALA shall administer this Chapter, or a portion thereof, as authorized by a RWQCB.
- (b) An ALA shall provide a minimum of 90 calendar days written notice to the RWQCB prior to the termination of ALA administration of this Chapter.
- (c) Where an ALA's jurisdiction is included in more than one Region, RWQCBs and the ALA shall attempt to establish one common authority to administer this Chapter.
- (d) The ALA shall provide assurance that the permitting of all new OWTS subject to ALA authority meets or exceeds the requirements contained in this Chapter.

Authority Cited: CA Water Code § 13267(a), 13267(b)(1), 13291, 13291(b)(3)

#### ARTICLE 4 PERFORMANCE AND MONITORING

#### §22910. SWRCB -- General Standards.

- (a) New OWTS and OWTS subject to major repair shall be operated to accept and treat flows of domestic wastewater excluding any material not generally associated with toilet flushing, food preparation, laundry and personal hygiene. Additionally, OWTS may be designed and operated to accept:
  - (1) wastewater from commercial establishments, facilities, and systems that exclude hazardous waste, as defined in Title 22 of the California Code of Regulations;
  - (2) wastewater from nonresidential facilities after use of pretreatment systems to reduce wastewater strength below high strength waste levels; and/or
  - (3) wastewater from nonresidential facilities that use waste segregation practices and systems to reduce pollutants entering the OWTS.
- (b) New OWTS shall be operated and maintained so as not to cause a violation of water quality objectives, or to impair present or future beneficial uses of water, or to cause pollution, nuisance, or contamination of the waters of the State.
  - (c) All OWTS shall meet the following performance requirements:
    - (1) no discharge to the land surface from an OWTS shall result; and
    - (2) the dispersal site shall not attract or be a source of vectors;

- (3) no odors constituting a nuisance shall result from any component of the OWTS;
- (4) not back-up into the structure served; and
- (5) not otherwise constitute a public health threat as determined by the local health officer or his/her designee.
- (d) All new OWTS or OWTS subject to major repair shall be designed based on the expected influent wastewater quality and quantity and the characteristics of the site and soils.
- (e) Effluent discharged to the dispersal field shall not exceed the levels designated as high strength wastewater.
- (f) New OWTS and OWTS subject to major repair shall be designed to disperse effluent into an unsaturated soil zone.
- (g) Wastes from holding tanks, recreational vehicles, and portable toilets that contain materials deleterious and inhibiting to OWTS operation shall not be discharged to OWTS.
- (h) A qualified professional shall perform evaluations for all new OWTS and OWTS subject to major repair, including a site investigation.
- (i) A qualified professional shall design all new and replacement OWTS providing supplemental treatment before a permit is issued to ensure compliance with the site suitability criteria identified in this Chapter.
- (j) The owner or authorized representative shall provide appropriate notification of a site investigation if required by the PA.
- (k) A qualified professional shall design all new OWTS and OWTS subject to major repair.
- (l) A Licensed General Engineering Contractor (Class A) or Sanitation System Contractor (Specialty Class C-42) shall construct all new OWTS in accordance with California Business and Professions Code Section 7056 and Section 83242, Article 3, Division 8, Title 16 of the California Code of Regulations. An owner-builder may construct a conventional system.
- (m) If required by the PA, a qualified professional shall inspect all new OWTS installations and installations for OWTS subject to major repair and shall prepare a Record Plan. The qualified professional shall certify in writing that the installation meets the design approved by the PA. The PA shall not issue the final approval until the certification and record plan are received.
- (n) Upon completion of OWTS construction, the owner or owner's authorized representative shall submit Record Plans to the PA.
- (o) The PA may conduct periodic inspections of any OWTS permitted under this Chapter. Such inspections shall include the overall OWTS conditions, mechanics, operational function, and dispersal system condition and operation.

(p) The PA may evaluate the treatment performance of any OWTS permitted under this Chapter by visual assessment or an assessment of water quality data from laboratory analysis of OWTS effluent or groundwater and/or surface water as appropriate.

Authority Cited: CA Water Code §13260, 13264, 13267, 13269, 13291

#### §22910.5 SWRCB - Monitoring

The following requirements apply only to new OWTS and OWTS subject to major repair, where the OWTS is located less than 100 feet from impaired surface water and OWTS have been identified by the Regional Board as contributing to the specific impairment of that surface water pursuant to Section 303(d) of the Clean Water Act, and to any OWTS located where the Regional Board and where applicable, the ALA, has adopted a water quality improvement program pursuant to Section 22940 of this Chapter.

- (a) New OWTS and OWTS subject to major repair shall be visually inspected biannually, or at an alternate frequency as determined by the permitting authority, to document any failure of an OWTS, including but not limited to:
  - (1) any evidence of surfacing wastewater
  - (2) field saturation, as evidenced by localized dampness and/or hydrophilic plants
  - (3) presence of any nuisance conditions, such as odors or evidence of insect breeding
- (b) New OWTS that incorporate supplemental treatment and OWTS subject to major repair that incorporate supplemental treatment, except mound systems and single-pass sand filter systems, shall be subject to the following additional requirements:
  - (1) Where the permitting authority has determined that supplemental treatment is necessary to reduce total suspended solids, biochemical oxygen demand, and/or fecal coliform concentration, the supplemental treatment unit effluent shall be tested within 90 days of first use, and shall be subject to subsequent biannual testing, or at an alternate testing frequency as determined by the permitting authority. The initial and subsequent testing shall be limited to those constituents for which the permitting authority establishes site-specific supplemental treatment unit effluent quality goals based upon Basin Plan requirements and/or a water quality improvement program adopted pursuant to Section 22940 of this Chapter.
  - (2) Effluent quality testing required pursuant to §22910.5(b)(1) shall be analyzed by a California Department of Health Services certified laboratory.
- (c) Visual inspections and effluent quality sample collection shall be conducted by a qualified service provider, who shall provide a signed copy of an inspection report and, as applicable, sample results to the OWTS owner or the owner's authorized agent.

(d) The OWTS owner or owner's authorized agent shall submit the results of all required monitoring to the permitting authority no more than 30 days following the date of the monitoring activity. The monitoring information shall be provided in a format approved by the permitting authority.

Authority Cited: CA Water Code §13260, 13264, 13267, 13269, 13291

#### §22911. SWRCB -- Septic Tank Specifications

- (a) All septic tanks installed after the effective date of this Chapter must meet the structural requirements established by the PA.
- (b) Septic tanks installed or repaired after the effective date of this Chapter shall have at least two access openings and shall have watertight risers set at or near finished grade.

Authority Cited: CA Water Code § 13291 Reference: CA Water Code § 13291(b)(1)

#### §22912. SWRCB -- Requirements for Supplemental Treatment

- (a) When supplemental treatment is necessary to meet discharge standards established by the Regional Board, the OWTS providing such supplemental treatment shall conform to design standards established by the PA.
- (b) The PA may require additional monitoring for OWTS providing supplemental treatment to ensure compliance with discharge requirements.

#### §22914. SWRCB -- Dispersal Systems

- (a) The design and construction of dispersal systems shall comply with the requirements of this section and with other appropriate criteria established by the PA.
- (b) The type of system shall be determined on the basis of information concerning system location, soil permeability, area drainage, depth of groundwater, depth of fractured bedrock, depth of weathered bedrock, or impervious formations, slope, and hillside stability.

### ARTICLE 5: PROTECTING IMPAIRED SURFACE WATER AND GROUNDWATER

#### §22940. Provisions for Protecting Impaired Waters.

(a) The Regional Board and where applicable, the ALA, shall develop a program to improve the quality of impaired water bodies appearing on the 303(d) list where OWTS discharges in the designated watershed of such water bodies have

been identified by substantial evidence in the record as contributing to the specific impairment.

- (1) For impaired water bodies listed as of the effective date of this Chapter, the program shall be developed no later than 24 months following the effective date of this Chapter, and the program shall be implemented no later than 48 months following the effective date of this Chapter.
- (2) For impaired water bodies listed after the effective date of this Chapter, the program shall be developed no later than 24 months following Environmental Protection Agency approval of the listing, and the program shall be implemented no later than 48 months following Environmental Protection Agency approval of the listing.
- (3) For formerly listed water bodies delisted in accordance with applicable State requirements, program development and/or implementation may be terminated if deemed appropriate by the Regional Board and where applicable, the ALA.
- (b) The Regional Board and where applicable, the ALA, shall develop a program to improve the quality of impaired groundwater basins where OWTS discharges have been identified by substantial evidence in the record as contributing to the specific impairment.
- (c) Programs developed pursuant to the provisions of this Section shall include, but not be limited to:
  - (1) A description of the nature of actions which are necessary to achieve the objectives, including recommendations for appropriate action by any entity, public or private. These actions may include a prohibition of waste discharges, pursuant to Water Code §13280.
  - (2) A time schedule for actions to be taken, and a description of surveillance to be under taken to determine compliance with objectives.

## ARTICLE 6: RWQCB EXEMPTIONS AND AUTHORIZED LOCAL AGENCY (ALA) VARIANCES

#### §22946. SWRCB – General Variances

The PA may issue variances from the provisions of this Chapter for necessary repair work to an existing dispersal field provided such repair work is limited to the correction of a failure and will not exacerbate impairment of beneficial uses of surface water or groundwater.

#### §22947. SWRCB -- RWQCB Procedure for Establishing Exemptions.

A RWQCB may amend its basin plan establishing criteria and procedures for exemptions from this Chapter, or portions thereof. All such exemptions shall not be less protective of

water quality or human health within the particular location or area subject to the exemption than provided for in this Chapter.

Authority Cited: CA Water Code §13291, 13240, 1242, 13243.

Authority Cited: CA Water Code §13291.

#### **ARTICLE 7. SITE EVALUATION**

#### §22955. SWRCB -- Site Evaluation.

- (a) If a site evaluation report is required pursuant to §22901(d), this report shall comply with criteria established by the PA.
- (b) As a minimum, this report shall provide sufficient details of site conditions including soil permeability, depth of groundwater, depth of fractured rock or impervious formations, slope, hillside stability, and the location of water wells within 100 feet of the proposed dispersal system or 150 feet when the dispersal system includes one or more seepage pits, to ensure compliance with the provisions of this Chapter.